### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-011160 Address: 333 Burma Road **Date Inspected:** 29-Dec-2009

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Chen Ying Xin, Du Zhi Qun **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** Tower

# **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

#### BAY 10 SOUTH TOWER LIFT 4 CORNER B/C

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% and random Visual Testing (VT) of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as Tower Components. The weld designations reviewed are as follows.

SSTL4-1B/L-5A SSTL4-1L/L-3A

# BAY 11 EAST TOWER LIFT 4 CORNER A/B

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% and random Visual Testing (VT) of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as Tower Components. The weld designations reviewed are as follows.

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ESTL4-2B/L-59A/B (FROM 131M TOP TO 143M) ESTL4-2L/L-4A/B

## BAY 11 EAST TOWER LIFT 4 B/C CORNER TRIANGLE PLATE

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% and random Visual Testing (VT) of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as Tower Components. The weld designations reviewed are as follows.

ESTL4-2H/L-87, 85

This Quality Assurance (QA) Inspector observed the following work in progress:

Bay 10

#### SOUTH TOWER LIFT 4 B/C CORNER TRIANGLE PLATE

FCAW welding of weld joint 119 located on SSTL4-1J/L.

Welder is identified as 053869. ZPMC CWI is identified as Mr. Du Zhi Qun.

The welding variables recorded by QC appeared to comply with WPS-B-T-2133.

#### TOWER INTERIOR SPLICE PLATE REPAIR

FCAW welding of weld joint 1A located on NSD1-SPSA4-18.

Welder is identified as 040261. ZPMC CWI is identified as Mr. Gong Liang Zhu.

The welding variables recorded by QC appeared to comply with WPS-345-FCAW-2G(2F)-REPAIR.

#### **TOWER SPARE STRUT**

SMAW welding of weld joint 33 located on ND1-STSA3-1-99M-1.

Welder is identified as 040582. ZPMC CWI is identified as Mr. Chen Ying Xin.

The welding variables recorded by QC appeared to comply with WPS-B-T-2113.

SMAW welding of weld joint 46 located on ND1-STSA3-1-99M-1.

Welder is identified as 040268. ZPMC CWI is identified as Mr. Chen Ying Xin.

The welding variables recorded by QC appeared to comply with WPS-B-T-4113-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

# **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod 134-8257-0045, who represents the Office of Structural Materials

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for your project.

**Inspected By:** Gaikwad,Umesh Quality Assurance Inspector

**Reviewed By:** Clifford, William QA Reviewer